

ABSTRACT OF THE DISCLOSURE

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A method for in-place memory management in a Digital Signal Processing (DSP) architecture performing a Fast Fourier Transformation (FFT) upon a sequence of N data points, the sequence numbered from 0 to $N-1$, the method including storing each of the data points numbered from 0 to $(N/2)-1$ in a first memory space X and each of the data points numbered $N/2$ to $N-1$ in a second memory space Y , for each FFT stage 0 data point grouping including a first data point of the data points in the first memory space X and a corresponding second data point of the data points in the second memory space Y determining the parity of a data point memory index corresponding to the first and second data points, storing, if the parity is of a first parity value, the results of an FFT operation upon the first data point at the memory address in the first memory space X from which the first data point was fetched and the result of an FFT operation upon the second data point at the memory address in the second memory space Y from which the second data point was fetched, and storing, if the parity is of a second parity value, the results of an FFT operation upon the first data point at the memory address in the second memory space Y from which the second data point was fetched and the result of an FFT operation upon the second data point at the memory address in the first memory space X from which the first data point was fetched.